

**Oseltamivir or Zanamivir can be used for treatment and chemoprophylaxis**

- Antivirals shorten the course of illness when given within the first 1-2 days of influenza symptoms
- Avoid antivirals in pregnant women unless benefit outweighs risk
- This season the antiviral medicines amantadine and rimantadine are not recommended in the U.S. due to high levels of influenza resistance

	<b>Oseltamivir (Tamiflu®)</b>	<b>Zanamivir (Relenza®)</b>
<b>Effective for both Influenza A &amp; B</b>	<b>Yes</b>	<b>Yes</b>
<b>Administration</b>	<b>Oral</b>	<b>Inhaled</b>
<b>Treatment age</b>	<b>≥ 1 y.o.</b>	<b>≥ 7 y.o.</b>
<b>Treatment dosing frequency</b>	<b>Twice daily</b>	<b>Two inhalations twice daily</b>
<b>Prophylaxis age</b>	<b>≥ 1 y.o.</b>	<b>≥ 5 y.o.</b>
<b>Prophylaxis dosing frequency</b>	<b>Once daily</b>	<b>Two inhalations once daily</b>

**Consider for treatment with antiviral medicines**

- Any person with a potentially life-threatening influenza-related illness
- Persons with laboratory-confirmed influenza who are hospitalized, who have influenza pneumonia, who have bacterial co-infection, or who are at higher risk for influenza complications.
- Persons presenting to medical care within 48 hours of influenza illness who want to decrease the duration or severity of their symptoms and reduce transmission of influenza to others

**Consider for antiviral chemoprophylaxis while influenza is circulating in the community**

- Persons at high risk of serious complications during the 2 weeks after influenza vaccination
- Persons at high risk of serious complications for whom influenza vaccine is contraindicated
- Persons at high risk of serious complications, their family members, close contacts, and health-care workers when circulating strains of influenza virus in the community are not well-matched with vaccine strains
- Persons with immunosuppressive conditions who are not expected to mount an adequate antibody response to influenza vaccine.
- Health-care workers with direct patient care responsibilities who have not been vaccinated
- Unvaccinated staff and residents during an institutional influenza outbreak
- High risk children under 9 years old after receiving influenza vaccine for the first time until 2 weeks after the second vaccine dose

### Length of Antiviral Treatment and Chemoprophylaxis

	Treatment Length	Chemoprophylaxis Length		
		After exposure	Institutional outbreak	After vaccine*
<b>Oseltamivir</b> (Tamiflu®)	5 days	7 days	Minimum of 2 weeks or until outbreak over	2 weeks
<b>Zanamivir</b> (Relenza®)		10 days	Not proven effective for nursing home residents	2 weeks

\* If antiviral prophylaxis is desired for high-risk individuals during the time immunity is developing. N/A

#### **Pediatric Points**

- Children 6 months-8 years old who have never had an influenza vaccine need 2 doses of influenza vaccine,  $\geq 1$  month apart to be optimally protected. Therefore, if a high-risk child is vaccinated when there is influenza in the community, antiviral prophylaxis may need to be continued for 6 weeks for optimal protection.
- For pediatric antiviral use where no liquid formulation is available, open the capsule or crush the tablet, and give the appropriate dose in cherry syrup.

#### **ANTIVIRAL MEDICINES FOR INFLUENZA**

##### **Oseltamivir (Tamiflu®)**

- Treatment and prophylaxis of both influenza A & B in  $\geq 12$  months old.
- Treatment: 75 mg PO **twice daily** for 5 days.
  - Pediatric treatment dosing based on weight:  $\leq 15$  kg, 30 mg BID;  $>15$ -23 kg, 45 mg BID;  $>23$ -40 kg, 60 mg BID;  $>40$  kg, 75 mg PO BID
- Prophylaxis: 75 mg PO **once daily**
  - Pediatric prophylaxis dosing based on weight:  $\leq 15$  kg, 30 mg BID;  $>15$ -23 kg, 45 mg BID;  $>23$ -40 kg, 60 mg BID;  $>40$  kg, 75 mg PO BID
- Comes as 75 mg tablet and 60 mg/5 ml suspension
- Side effects: nausea & vomiting; **new FDA precaution (as of 11/06/06) concerning reports of unusual behavior occurring while on oseltamivir (primarily in children) with confusion, delirium, or self-injury**
- Reduce adult dose to 75 mg every other day when CrCl 10-30 ml/min

##### **Zanamivir (Relenza®)**

- For both influenza A & B: Treatment in  $\geq 7$  y.o.; prophylaxis in  $\geq 5$  y.o.
- Comes as an inhaler
- Contains lactose
- Inhalation (10 mg) twice daily for 5 days.
- Side effects: Bronchospasm
- Not recommended for treatment or prophylaxis in person with underlying airways disease

**For more detailed information about each antiviral medication, see:**

[www.cdc.gov/flu/professionals/treatment](http://www.cdc.gov/flu/professionals/treatment)